

Ornamental Fence Install Spec Sheet

Aluminum & Steel · Residential, Pool-Code & Commercial · 2026 Edition

1. Panel & Grade Specifications

Grade	Picket	Rail	Wall thickness	Application
Residential	5/8" sq.	1" x 1"	0.055"–0.062"	Yards, gardens, pool
Residential Plus	3/4" sq.	1.25" x 1.25"	0.062"–0.075"	6 ft privacy heights
Commercial	1" sq.	1.5" x 1.5"	0.075"–0.090"	Schools, HOA perimeter
Industrial	1" sq.	1.75" x 1.75"	0.100"–0.125"	Security, utility

2. Material & Finish

- Alloy: 6005-T5 architectural-grade aluminum (avoid 6063 for residential).
- Finish: AAMA 2604 powder coat — 20+ year UV warranty. Standard color: matte black.
- Hardware: 304 stainless steel screws & brackets. No zinc — rust-streaks panels in 2–3 years.
- Gate hinges: self-closing tension hinge, stainless pin, rated 100 lb minimum.
- Latch: magnetic self-latching, key-lockable, mounted at 54" minimum (pool code).

3. Post Setting

Item	Spec
Post depth	36" minimum (below KC metro frost line)
Hole diameter	10" round
Concrete	One full 60-lb bag, 4,000 PSI, crowned 1" above grade
Post spacing	6'-0" on center (max 8'-0" on rackable panels)
Corner / end / gate posts	Upsize one grade; bolt-through bracket required
Plumb tolerance	≤ 1/8" out of plumb across full post height

4. Pool Code Compliance (IRC / ICC)

- Minimum panel height: 48" (4 ft) from finished grade.
- Picket spacing: less than 4" — a 4" sphere must not pass.
- Bottom rail to grade: less than 4" clearance.
- Gate: opens outward, self-closing, self-latching, latch ≥ 54" above grade.
- No horizontal members within 45" of grade that create climbable footholds.

5. Sloped & Stepped Installations

Standard panels are **rackable** to ~15° of grade — pickets pivot at the rail joint, no step-downs needed. Beyond 15°, step the panels in 4"–6" increments and use stepped post height to maintain < 4" bottom-rail clearance for pool code.

6. Gate Specifications

Gate type	Leaf width	Frame	Hardware
Walk gate	36"–48"	Welded, upsized rail	Self-close tension hinge, magnetic latch
Double drive	8'–12'	Welded, drop rod	Heavy strap hinge, cane bolt, padlock loop
Mower gate	60"	Welded, upsized rail	Self-close tension hinge, magnetic latch
Automated	10'–16'	Welded, reinforced	UL 325 operator, photo eye, edge sensor

7. Site Prep & Layout

- Call 811 minimum 3 business days before dig. Mark all private utilities (irrigation, low-voltage, invisible fence).
- Confirm property pins; if missing, recommend a survey before fabricating gates.
- HOA / city permit on file before mobilization (Overland Park, Olathe, Lee's Summit require permit).
- String-line set the full run; flag every post location and gate swing.
- Drainage: do not bridge swales — step panels or notch bottom rail per engineer.

8. Quality Control Checklist

- ✓ Post depth verified at 36" before concrete pour
- ✓ Concrete crowned away from post — no standing water at base
- ✓ All panels level within 1/8" across run
- ✓ All hardware stainless; no zinc or galv on visible surfaces
- ✓ Gates swing freely, self-close from 6" open, self-latch on first attempt
- ✓ Pool sections: 4" sphere test passed at every opening
- ✓ Touch-up paint applied to any field cuts or scratches
- ✓ Site cleaned, concrete spoils removed, customer walkthrough completed

9. Warranty

Kodiak Fence Co. provides a written **10-year workmanship warranty** on labor, post-set, and gate operation. Panels carry a **lifetime structural warranty** and **20-year finish warranty** from the manufacturer (AAMA 2604).